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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,657	12/27/2001	Vaishali Angal	005822.P001	7953
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HEIMLICH LAW 5952 DIAL WAY SAN JOSE, CA 95129			PITARO, RYAN F	
			ART UNIT	PAPER NUMBER
			2174	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/033,657	Applicant(s) ANGAL ET AL	
	Examiner Ryan F. Pitaro	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-58 have been examined.

Response to Amendment

2. This action is responsive to the communication filed 9/24/2005. Claims 1-58 are pending, claims 1-58 have been amended. This action is non Final.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-58 rejected under 35 U.S.C. 103(a) as being unpatentable over Ali et al ("Ali", WO 01/44932) in view of Rollins et al ("Rollins", US 2002/0129060).

As per independent claim 1, Ali discloses a method comprising: receiving a schema having elements (Ali, Figure 4A item 410); receiving an instance related to said

schema (Ali, Figure 4A item 414); receiving a display specification (Ali, Figure 4A item 412); and generating a display (Ali, Figure 4A item 424). Ali does not distinctly point out a display specification having rules for schema elements, and generating a display based on the schema elements and the display specification rules. However, Rollins teaches receiving a display specification having rules for schema elements ([0032] lines 2-5), and generating a display based on the schema elements and the display specification rules ([0032] lines 5-9). Therefore it would have been obvious to an artisan at the time of the invention to combine the specification rules of Rollins with the method of Ali. Motivation to do so would have been to allow users to customize an interface based upon their preferences.

As per claim 2, which is dependent on claim 1, Ali-Rollins discloses a method wherein the display specification further comprises presenters, wherein the presenters determine how the instance appears on the display (Ali, Figure 7B).

As per claim 3, which is dependent on claim 2, Ali-Rollins discloses a method wherein the actions modify the presenters (Ali, Figure 7B item 700).

As per claim 5, which is dependent on claim 1, Ali-Rollins discloses a method wherein the display specification further comprises presenters selected from the group consisting of tree, tabbed, list, and form (Ali, Page 22 lines 9-10).

As per claim 6, which is dependent on claim 5, Ali-Rollins discloses a method wherein the presenters may have embedded within them presenters (Ali, Page 10 lines 22-26).

As per claim 7, which is dependent on claim 1, Ali-Rollins discloses a method wherein the display specification further comprises display attributes selected from the group consisting of, font name, font style, font size, icons, access mode, folder, hiding, editor, lines, graphics, sound, and color (Ali, Figure 4A item 412; *XSL allows you define the appearance of XML elements, through fonts, sizes, colors, etc.*).

As per claim 8, which is dependent on claim 1, Ali-Rollins discloses a method wherein the schema has a structure selected from the group consisting of a tree and directed graph (Ali, Page 5 lines 14-16).

As per claim 9, which is dependent on claim 1, Ali-Rollins discloses a method wherein the schema and instance are well formed (Ali, Page 5 lines 3-8; *wherein an XSL processor will not proceed if XML data and schema are not well-formed*).

As per claim 10, which is dependent on claim 1, Ali-Rollins discloses a method wherein the schema and instance are compliant with the extensible markup language (XML) (Ali, Page 15 lines 8-10; *XML schema and XML data*).

As per claim 11, which is dependent on claim 1, Ali-Rollins discloses a method wherein the display specification is compliant with the extensible markup language (XML) (Ali, Page 15 lines 8-10; *XSL templates*).

As per claim 12, which is dependent on claim 11, Ali-Rollins discloses a method wherein the display specification supports node selection from the group consisting of xmlns:Tagname, any:Tagname, any:any, and xpath language (Ali, page 15 lines 8-10; *wherein XSL templates include xmlns in type declarations*).

As per claim 13, which is dependent on claim 11, Ali-Rollins discloses a method wherein the display specification supports instance display attributes selected from the group consisting of hide, hide children, and override (Ali, *hiding and overriding are a part of XML data and XML schema which is supported by the XSL template*).

As per claim 14, which is dependent on claim 1, Ali-Rollins discloses a processing system comprising a processor, which when executing a set of instructions performs the method (Ali, Figure 4A item 302).

As per claim 15, which is dependent on claim 1, Ali-Rollins discloses a machine-readable medium having stored thereon instructions, which when executed performs the method (Ali, Figure 4D item 304).

As per claim 16, which is dependent on claim 1, Ali-Rollins discloses a method further comprising receiving information from the generated display (Ali, Figure 7A).

As per claim 17, which is dependent on claim 16, Ali-Rollins discloses a method wherein the information is from a user input (Ali, Figure 7A item 706 to Figure 7B).

As per claim 18, which is dependent on claim 1, Ali-Rollins discloses a method wherein the display specification further comprises presenters, wherein presenters may receive information from a user input (Ali, Figure 7A items 706,710; *Type a question*).

As per claim 19, which is dependent on claim 18, Ali-Rollins discloses a method further comprising actions, wherein the actions are based on information received by the presenters (Ali, Figure 7A 706 to Figure 7B).

As per independent claim 20, Ali discloses a method comprising: receiving an XML schema (Ali, Figure 4A item 410). Ali does not distinctly point out a display

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specification having rules for schema elements, and generating a display based on the schema elements and the display specification rules. However, Rollins teaches receiving a display specification having rules for displaying schema elements (Rollins, [0032] lines 2-5) dynamically generating a user interface based upon said XML schema and said display specification (Rollins, [0032] lines 5-9). Therefore it would have been obvious to an artisan at the time of the invention to combine the specification rules of Rollins with the method of Ali. Motivation to do so would have been to allow users to customize an interface based upon their preferences.

As per claim 21, which is dependent on claim 20, Ali-Rollins discloses a method wherein the display specification is well formed (Ali, Page 5 lines 3-8; *wherein an XSL processor will not proceed if XML data and schema are not well-formed*).

As per claim 22, which is dependent on claim 20, Ali-Rollins discloses a method wherein the display specification is compliant with the extensible markup language (XML) (Ali, Page 15 lines 8-10).

As per claim 23, which is dependent on claim 20, Ali-Rollins discloses a method wherein dynamically generating the user interface is further based upon an XML data instance (Ali, Figure 4A item 414).

As per claim 24, which is dependent on claim 20, Ali-Rollins discloses a method wherein the display specification further comprises presenters, wherein the presenters determine how an XML data instance appears on the user interface (Ali, Figure 7B).

As per claim 25, which is dependent on claim 24, Ali-Rollins discloses a method wherein the display specification further comprises actions, wherein the actions modify the presenters (Ali, Figure 7B item 700).

As per claim 26, which is dependent on claim 20, Ali-Rollins discloses a method wherein the display specification further comprises presenters selected from the group consisting of tree, tabbed, list, and form (Ali, Page 22 lines 8-10).

As per claim 27, which is dependent on claim 26, Ali-Rollins discloses a method wherein the presenters may have embedded within them presenters (Ali, Page 10 lines 22-26).

As per claim 28, which is dependent on claim 20, Ali-Rollins discloses a method wherein the display specification further comprises display attributes selected from the group consisting of font name, font style, font size, icons, access mode, folder, hiding, editor, lines, graphics, sound, and color (Ali, Figure 4A item 412; *XSL allows you define the appearance of XML elements, through fonts, sizes, colors, etc.*).

As per claim 29, which is dependent on claim 20, Ali-Rollins discloses a method wherein the display specification further comprises an editor type selected from the group consisting of forms, check boxes, radio buttons, check lists, combo box, drop down list, tables, text, label, text window, and graphics (Ali, Figure 8A; *type a question, change a picture, change name item 804*).

As per claim 30, which is dependent on claim 29, Ali-Rollins discloses a method wherein the display specification supports restriction of any schema element and/or

attribute (Ali, *the support of XML schema by the XSL includes type definition which is a restriction or an extension*).

As per claim 31, which is dependent on claim 20, Ali-Rollins discloses a processing system comprising a processor, which when executing a set of instructions performs the method (Ali, Figure 4A item 302).

As per claim 32, which is dependent on claim 20, Ali-Rollins discloses a machine-readable medium having stored thereon instructions, which when executed performs the method (Ali, Figure 4D item 304).

As per claim 33, which is dependent on claim 20, Ali-Rollins discloses a method further comprising receiving information from the dynamically generated user interface (Ali, Figure 7A).

As per claim 34, which is dependent on claim 20, Ali-Rollins discloses a method wherein the information is from a user input (Ali, Figure 7A item 706 to Figure 7B).

As per claim 35, which is dependent on claim 20, Ali-Rollins discloses a method wherein the display specification further comprises presenters, wherein presenters may receive information from a user input (Ali, Figure 7A item 706-710;*type a question*).

As per claim 36, which is dependent on claim 35, Ali-Rollins discloses a method further comprising actions, wherein the actions are based on information received by the presenters (Ali, Figure 7A item 706 to Figure 7B).

As per claim 37, which is dependent on claim 36, Ali-Rollins discloses a method wherein the actions may communicate to a destination selected from the group consisting of another program, a database, a user interface, a data instance, a

processor, an XML instance, a schema, the XML schema, and the display specification (Ali, Page 16 lines 6-15).

As per independent claim 38, Ali discloses a method comprising: receiving a schema having elements (Ali, Figure 4A item 410); receiving an instance related to said schema (Ali, Figure 4A item 414); receiving a display specification (Ali, Figure 4A item 412); and generating a display (Ali, Figure 4A item 424). Ali does not distinctly point out a display specification having rules for schema elements, and generating a display based on the schema elements and the display specification rules. However, Rollins teaches receiving a display specification having rules for schema elements ([0032] lines 2-5), and generating a display based on the schema elements and the display specification rules ([0032] lines 5-9). Therefore it would have been obvious to an artisan at the time of the invention to combine the specification rules of Rollins with the method of Ali. Motivation to do so would have been to allow users to customize an interface based upon their preferences.

As per claim 39, which is dependent on claim 38, Ali-Rollins discloses an apparatus wherein the display specification is well formed (Ali, Page 5 lines 3-8; *wherein an XSL processor will not proceed if XML data and schema are not well-formed*).

As per claim 40, which is dependent on claim 38, Ali-Rollins discloses an apparatus wherein means for generating a display further comprises means for a user to view information related to the instance (Ali, Figure 7A).

As per claim 41, which is dependent on claim 40, Ali-Rollins discloses an apparatus further comprising means for the user to modify information related to the instance (Ali, Page 19 lines 6-8).

As per claim 42, which is dependent on claim 38, Ali-Rollins discloses an apparatus wherein the schema and instance are compliant with the extensible markup language (XML) (Ali, Page 15 lines 8-10; *XML schema and XML data*).

As per claim 43, which is dependent on claim 38, Ali-Rollins discloses a machine-readable medium having stored thereon information representing the apparatus (Ali, Figure 4D item 304).

As per claim 44, which is dependent on claim 38, Ali-Rollins discloses an apparatus further comprising receiving information from the display (Ali, Figure 7A).

As per claim 45, which is dependent on claim 44, Ali-Rollins discloses an apparatus wherein the information is from a user input (Ali, Figure 7A item 706-Figure 7B).

As per claim 46, which is dependent on claim 38, Ali-Rollins discloses an apparatus wherein the display specification further comprises presenters, wherein presenters may receive information from a user input (Ali, Figure 7A items 706, 710; *type a question*).

As per claim 47, which is dependent on claim 46, Ali-Rollins discloses an apparatus further comprising actions, wherein the actions are based on information received by the presenters (Ali, Figure 7A item 706 to Figure 7B).

As per claim 48, which is dependent on claim 47, Ali-Rollins discloses an apparatus wherein the actions may communicate to a destination selected from the group consisting of another program, a database, a user interface, a data instance, a processor, an XML instance, a schema, the XML schema, and the display specification (Ali, Page 16 lines 6-15).

As per independent claim 49, Ali-Rollins discloses a system comprising a processor, which when executing a set of instructions, performs the following: retrieves a schema having elements (Ali, Figure 4A item 410); retrieves data (Ali, Figure 4A item 414); retrieves a display specification having rules for schema elements (Rollins, [0032] lines 2-5). Ali does not distinctly point out a display specification having rules for schema elements, and generating a display based on the schema elements and the display specification rules. However, Rollins teaches receiving a display specification having rules for schema elements ([0032] lines 2-5), and generating a display based on the schema elements and the display specification rules, and said data ([0032] lines 5-9). Therefore it would have been obvious to an artisan at the time of the invention to combine the specification rules of Rollins with the method of Ali. Motivation to do so would have been to allow users to customize an interface based upon their preferences.

As per claim 50, which is dependent on claim 49, Ali-Rollins discloses a system wherein the user interface format is generated dynamically based substantially upon the schema (Ali, Page 18 lines 10-14).

As per claim 51, which is dependent on claim 49, Ali-Rollins discloses a system wherein the user interface further comprises: receiving a user input; and modifying the data (Ali, Page 19 lines 6-8).

As per claim 53, which is dependent on claim 49, Ali-Rollins discloses a system further comprising receiving information from the user interface (Ali, Figure 7A).

As per claim 54, which is dependent on claim 53, Ali-Rollins discloses a system wherein the information is from a user input (Ali, Figure 7A item 706 to Figure 7B).

As per claim 55, which is dependent on claim 49, Ali-Rollins discloses a system wherein the display specification further comprises presenters, wherein presenters may receive information from a user input (Ali, Figure 7A items 706,710; *type a question*).

As per claim 56, which is dependent on claim 55, Ali-Rollins discloses a system further comprising actions, wherein the actions are based on information received by the presenters (Ali, Figure 7A item 706 to Figure 7B).

As per claim 57, which is dependent on claim 56, Ali-Rollins discloses a system wherein the actions may communicate to a destination selected from the group consisting of another program, a database, another user interface, a data instance, a processor, an XML instance, the schema, the data, the user interface, and the display specification (Ali, Page 16 lines 6-15).

As per independent claim 58, Ali discloses an apparatus for dynamically generating a user interface comprising: means for receiving an XML schema having elements (Ali, Figure 4A item 410); means for receiving an XML instance related to said schema (Ali, Figure 4A item 414); means for receiving an XML compliant display

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specification having actions and presenters (Ali, Figure 4A item 412; page 27 lines 9-10) means for receiving a user input from the user interface (Ali, Figure 7A items 706,710; *type a question*), and means for communicating to a program or processor through actions and presenters (Ali, Figure 7A item 706 to Figure 7B; Figure 4A item 422). Ali does not distinctly point out a display specification having rules for schema elements, and generating a display based on the schema elements and the display specification rules. However, Rollins teaches receiving a display specification having rules for schema elements ([0032] lines 2-5), means for generating a display based upon the display specification and said XML schema elements (Rollins, [0032] lines 5-9). Therefore it would have been obvious to an artisan at the time of the invention to combine the specification rules of Rollins with the method of Ali. Motivation to do so would have been to allow users to customize an interface based upon their preferences.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ali et al ("Ali", WO 01/44932) and Rollins et al ("Rollins", US 2002/0129060).

As per claim 4, which is dependent on claim 3, Ali-Rollins fails to expressly point out type checking and structural validation. However, Official Notice is taken that type checking and structural validation are well known in the art of XML schemas. Type checking adds overhead, but if data accuracy and integrity is important, then using DTDs alone is not very helpful, thus the use of XML schemas in the current invention. Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Ali-Rollins with the current teaching of type checking. Motivation to do so would have been to provide accurate information.

As per claim 52, which is dependent on claim 49, Ali-Rollins fails to disclose transferring a payment and/or a credit. However, Official Notice is taken that transferring a payment and/or a credit is well known in the art. Online transactions have been taking place for a long time, online transactions reduce the need for extra employees and allows for faster transactions because there is no need for waiting for checks to clear before the product is shipped for example. Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ali-Rollins with the current teaching of transferring payments. Motivation to do so would have been to provide a faster way of doing business.

Response to Arguments

Applicant's arguments with respect to claims 1-58 have been considered but are moot in view of the new ground(s) of rejection.

The Office Notes that the factual assertion set forth under Official Notice in the office action dated 07/12/2005 was not contested.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan F. Pitaro whose telephone number is 571-272-4071. The examiner can normally be reached on 7:00am - 4:30pm M-Th, and alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Pitaro
Art Unit 2174
Patent Examiner

RFP


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